

Appl. No. 10/708,330
Amdt. dated July 29, 2005
Reply to Office action of May 04, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 5 Claim 1 (currently amended): A method for fabricating a liquid crystal display (LCD) with a uniform common voltage, the method comprising:
- providing a lower substrate having a display area and a non-display area;
 - forming a plurality of scan lines, a plurality of common electrodes, and a plurality of common electrode pads on an upper surface of the lower substrate
 - 10 simultaneously, wherein the common electrodes are used for transmitting a common voltage and are positioned at the same plane as a plane where the common electrode pads are positioned on the lower substrate, and the common electrode pads are electrically connected to the common electrodes;
 - forming a plurality of data lines on the upper surface of the lower substrate, wherein
 - 15 the data lines are arranged perpendicular to the scan lines to form a pixel matrix in the display area, the pixel matrix comprising a plurality of pixels;
 - providing an upper substrate;
 - forming a plurality of photo spacers on a bottom surface of the upper substrate, each photo spacer corresponding to one of the common electrode pads on the lower
 - 20 substrate;
 - forming a conductive material layer on the bottom surface of the upper substrate to make the conductive material layer cover the surface of the photo spacers;
 - combining the upper substrate and the lower substrate face to face by using the photo spacers to support a space between the upper substrate and the lower substrate,
 - 25 and electrically connecting the conductive material layer covering the surface of each of the photo spacers to the common electrode pads corresponding to each of the photo spacers; and
 - filling a plurality of liquid crystal molecules in the space between the upper substrate

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and the lower substrate, and sealing the space between the upper substrate and the lower substrate.

Claim 2 (original): The method of claim 1 further comprising forming a plurality of thin
5 film transistors (TFTs) on the upper surface of the lower substrate, wherein the TFTs are positioned on each intersection of the scan lines and the data lines as switching elements of the pixels.

Claim 3 (original): The method of claim 2 further comprising forming a plurality of pixel
10 electrodes electrically connected to the TFTs on the upper surface of the lower substrate.

Claim 4 (original): The method of claim 1 further comprising forming a plurality of color
filters on the bottom surface of the upper substrate, wherein each of the color filters comprises a red color filter, a green color filter, and a blue color filter.

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Claim 5 (original): The method of claim 1 further comprising forming a plurality of color filters on the upper surface of the lower substrate, wherein each of the color filters comprises a red color filter, a green color filter, and a blue color filter.

20 Claim 6 (original): The method of claim 1 further comprising forming a polarizer on a bottom surface of the lower substrate and forming a polarizer on an upper surface of the upper substrate.

Claim 7 (original): The method of claim 1, wherein each of the pixels contains one of the
25 photo spacers.

Claim 8 (original): The method of claim 1, wherein the conductive material layer is a transparent indium tin oxide (ITO) layer.

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Claim 9 (currently amended): An LCD with a uniform common voltage, the LCD comprising:

- 5 a lower substrate having a display area and a non-display area on an upper surface thereof, the lower substrate comprising:
- a plurality of scan lines and a plurality of data lines, wherein the data lines are arranged perpendicular to the scan lines to form a pixel matrix in the display area, the pixel matrix comprising a plurality of pixels;
 - a plurality of common electrodes for transmitting a common voltage; and
 - 10 a plurality of common electrode pads electrically connected to the common electrodes, the common electrode pads and the common electrodes are positioned at a same plane on the lower substrate;
- an upper substrate positioned on the lower substrate oppositely, the upper substrate comprising:
- 15 a plurality of photo spacers positioned on a bottom surface of the upper substrate for supporting a space between the upper substrate and the lower substrate, wherein each of the photo spacers corresponds to one of the common electrode pads of the lower substrate; and
 - a conductive material layer positioned on the bottom surface of the upper
 - 20 substrate covering the photo spacers, wherein the conductive material layer covering the photo spacers is connected to each of the common electrode pads corresponding to each of the photo spacers; and
 - a plurality of liquid crystal molecules filled in the space between the upper substrate and the lower substrate.

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Claim 10 (original): The LCD of claim 9, wherein the lower substrate further comprises a plurality of TFTs positioned on each intersection of the scan lines and the data lines as switching elements of the pixels.

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Claim 11 (original): The LCD of claim 9 further comprising a plurality of pixel electrodes positioned in the pixels and electrically connected to the TFTs.

- 5 Claim 12 (original): The LCD of claim 9 further comprising a plurality of color filters positioned on the bottom surface of the upper substrate, wherein each of the color filters comprises a red color filter, a green color filter, and a blue color filter.

- 10 Claim 13 (original): The LCD of claim 9 further comprising a plurality of color filters positioned on the upper surface of the lower substrate, wherein each of the color filters comprises a red color filter, a green color filter, and a blue color filter.

- 15 Claim 14 (original): The LCD of claim 9 further comprising a polarizer positioned on the upper surface of the upper substrate and a polarizer positioned on the bottom surface of the lower substrate.

Claim 15 (original): The LCD of claim 9, wherein each of the pixels contains one of the photo spacers.

- 20 Claim 16 (original): The LCD of claim 9, wherein the conductive material layer is a transparent ITO layer.